

A Curriculum For Hindhayes - Building Science Knowledge

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Hindhayes Learning Experiences EYFS	Experiences	Listening Walk Walk around the school grounds to look for early signs of Autumn Autumn Craft Harvest – visit to church, / food bank donation point Ourselves / Our bodies	Exploring Light and Dark – investigating shadows/dark spaces/reflective materials Day & Night animals Looking at our planet from Space using videos/stories Hibernating animals – what is hibernation? The season of Winter – what happens in winter? Exploring Ice /frost Planting Bulbs with play worker	Explore the school grounds looking for signs of winter Exploring ice / frost Winter crafts Tasting gingerbread & baking gingerbread Floating and sinking exploration & investigation Tasting Chinese foods Materials (3 little pigs, boat making, floating and sinking)	Spring Seasonal Change – Spring Walk around school / local area (e.g. park) Spring Crafts Matching baby mother and baby animals (tadpoles) Make a wormery (Science week 2022) Tidy the quad – where does rubbish go? Exploring reduce, re-use, recycle (Science week 2022) Tasting hot cross buns, Simmel Cake, Easter Biscuits	Comparing / planting beans Sow seeds in the quad Bean life cycle Maintaining plants – watering etc Make a bug hotel Minibeast hunt Where does our food come from? Butterfly / tadpole life cycle Minibeasts	African animals Sea creatures in warm oceans Summer seasonal changes
	Language	autumn, winter, seasons, year, conker, acorn, leaf, branch etc. senses, taste, mouth, listen, ear, smell, nose, touch, hand, see, sight, eye.	Light, dark, day, night, shadows, shiny, reflective, dull, materials, nocturnal, hibernation. Nocturnal animal vocabulary e.g. owl, fox, badger, bat etc	Material, wood, plastic, glass etc. Waterproof, not-waterproof Cold, ice, frost, winter, season	Season, Spring, blossom, bud, flower, grow Mother, baby animal vocabulary e.g. lamb, calf etc Reduce, re-use, re-cycle, rubbish, waste etc Minibeast vocabulary (if taught in this half term)	Bean, plant, grow, flower, root, soil, stem etc Minibeast vocabulary (e.g. spider, centipede etc) Life cycle	Animal vocabulary, ocean, sea, sea creature/plant vocabulary (e.g. coral reef), summer, weather vocabulary.
	Texts	The listening Walk, The big book of families, big book of feelings, funny bones	Owl Babies. Whatever Next, Percy the Park Keeper, On the Way Back Home, The Owl who was afraid of the dark, non-fiction texts relating to light/dark (DK finder)	The gingerbread man, Don't rock the boat, Who sank the boat?, non-fiction tests about seasons/materials (e.g. DK finders), Traditional tales	Tidy, Too Much Stuff, Here We Are, What we'll build, Where's the Elephant?, The Last Tree	Eddies garden, Olivers vegetables, Tree: seasons come, seasons go, Titch, Jaspers Beanstalk, The Tiny Seed, Goodnight Veggies, Have you ever seen a flower? Big book of blooms.	Handa's Surprise, Handa's Hen, Handa's Noisy Night, The Ugly Five, We all went on Safari, The Big book of the Blue.
Linked Early Learning Goals: Communication and Language , - Listening and attention, Speaking. Physical Development , Gross and Fine Motor Skills Personal, Social and Emotional Development Self regulation, Managing Self, Building Relationships, Understanding the World The Natural World Literacy Reading Comprehension Expressive Arts and Design , Creating with materials, Being Imaginative							

Key Stage 1 themes	Animals, Including Humans	Everyday Materials	Plants
	Living things and their habitats	Seasonal Changes	
National Curriculum Statutory Requirements	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name carnivores, herbivores and omnivores. Describe and compare the structure of common animals. Identify, name, draw and label the basic parts of the human body and talk about the senses.	Compare and group together a variety of common everyday materials based on their properties. Distinguish between natural and man made materials. Identify and name common materials e.g. wood, glass. Describe the simple properties of materials.	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants including trees.
	Notice that animals have offspring Describe the basic needs of animals for survival Describe the importance of humans for exercise, diet and hygiene.	Compare the difference between things that are living, dead or have never been alive. Identify how habitats provide for the basic needs of animals and plants. Identify and name a variety of plants and animals in their habitats. Describe how animals obtain their food from plants and other animals using the idea of a simple food chain.	Identify and compare the suitability of a variety of everyday materials Find out how the shapes of solid objects made from materials can be changed by squashing, bending, twisting etc. Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies.

Hindhayes Sticky Knowledge Year 1 Year 2	<p>Animals Including Humans Humans are animals Generally, all humans look different Our bodies are all different What a fair test means We have 5 senses Our senses work together Our brain helps us to understand our senses</p> <p>Animals Including Humans Humans need the right amount of certain things to remain healthy All animals have offspring Some offspring are live born, some hatch from eggs. Animals need certain things in order to grow into healthy adults. All animals need air, water, food and shelter to survive. Our heart beats faster when we exercise Our heart pumps blood around our body to our muscles There are 5 food groups (Children may be able to name them but this is not essential) We need food from each group to be healthy</p>	<p>Everyday Materials Material is what an object is made out of. Material names: wood, metal, plastic, glass, fabric Materials have different properties. Objects can be made from more than one material Materials have properties that make them suitable for a specific purpose Materials can be described by their properties A property of a material is something we can measure, see or feel, it helps us decide whether or not it is the best material for a specific purpose. Some materials (e.g. plastic) can be in different forms with different properties Everything is made up of materials – some things are made of more than one material Most materials have more than one property A property is something we can measure, see or feel Materials can be natural (found in nature) or man made (manufactured) Some (not all) solid materials can be changed by a force being applied to them Materials are tested to see how suitable they are for a purpose The properties of a material will determine how suitable it is for a purpose. Objects are chosen for a purpose based on their properties. Scientists test materials to see if they are suitable for a purpose Materials can have more than one property that makes them suitable/unsuitable Charles Macintosh invented waterproof fabric. Seasonal Change There are 4 seasons: Spring, Summer, Autumn, Winter Winter last for 3 months December, January, February Day length in Winter is short and nights are long The weather in Winter is cold Spring happens in March, April & May in the UK Day length begins to get longer in Spring Nights begin to get shorter in Spring The weather becomes warmer in Spring. There are lots of signs of growth and new life in Spring. An introduction to the Environment Waste can be disposed of in different ways. Reduce – means to use less Re-use – means to use something again. Re-cycling – when something is made into something new and used again.</p>	<p>Plants There are lots of different types of trees Different trees produce different shaped leaves Some trees lose their leaves, others don't. Trees have branches, leaves, roots and a trunk Leaves catch sunlight to help the plant grow Flowers and plants are living things. Even though flowers don't all look the same, they usually have the same basic parts. Children will have a basic understanding of the names / functions of the parts of a flowering plant. Children will have a basic understanding of the names / functions of the parts of a flowering plant. Plants can be classified in more than one way Plants are living things Plants growing from bulbs all look different – the bulbs look different too. Plants can grow from seeds or bulbs Note: seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them. Plants need specific conditions to thrive – this will not necessarily be the same for all plants (use example of cactus/arctic tundra) Most plants need water, light and warmth to grow healthily</p>
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